

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims.

1. (currently amended) A soluble scaffolded fusion polypeptide comprising one or more modules, each module comprising a functional ~~polypeptide~~ domain fused to a scaffold domain, wherein ~~the~~ each functional ~~polypeptide~~ domain ~~corresponds to~~ comprises the amino acid sequence of a soluble loop or strand of an integral membrane protein, and each scaffold domain comprises two scaffold strands, wherein one scaffold strand comprises the amino acid sequence of SEQ ID NO:6 and the other scaffold strand comprises the amino acid sequence of SEQ ID NO:7; and wherein the scaffolded fusion polypeptide binds an antibody that recognizes the native, properly folded form of said integral membrane protein but not linear fragments of said integral membrane protein.
2. (previously presented) The scaffolded fusion polypeptide of claim 1 comprising a plurality of said modules.
3. (canceled)
4. (canceled)
5. (canceled)
6. (original) The scaffolded fusion polypeptide of claim 2 in which a first scaffold domain is linked to a second scaffold domain via a polypeptide linker.
7. (currently amended) The scaffolded fusion polypeptide of claim 2 which ~~corresponds to~~ comprises an extracellular domain of a naturally occurring receptor.
8. (currently amended) The scaffolded fusion polypeptide of claim 7 which ~~corresponds to~~ comprises the extracellular domain of CCR5.

9. (previously presented) The soluble scaffolded fusion polypeptide of claim 2 comprising the amino acid sequence of SEQ ID NO:10.

10. (withdrawn) A nucleic acid encoding the scaffolded fusion polypeptide of claim 1.

11-16. (canceled)

17. (previously presented) A polypeptide produced by a method comprising:
(a) expressing from a host cell the polypeptide of claim 1; and
(b) recovering said polypeptide.

18. (withdrawn) A method of screening molecules that bind a scaffolded fusion polypeptide comprising:
(a) expressing from a host cell the polypeptide of claim 1; and
(b) identifying a molecule that binds to the polypeptide.

19-21. (canceled)

22. (previously presented) The scaffolded fusion polypeptide of claim 1 comprising a single said module.

23. (canceled)

24. (previously presented) The scaffolded fusion polypeptide of claim 6 wherein said linker comprises an amino acid sequence selected from the group consisting of:

- (a) the amino acid sequence of SEQ ID NO:8;
- (b) the amino acid sequence of SEQ ID NO:15; and
- (c) the amino acid sequence of SEQ ID NO:16.

25. (previously presented) The scaffolded fusion polypeptide of claim 9 comprising the amino acid sequence of SEQ ID NO:31.

26. (New) A soluble scaffolded fusion polypeptide comprising the amino acid sequence of SEQ ID NO:10.

27. (New) The scaffolded fusion polypeptide of claim 26 comprising the amino acid sequence of SEQ ID NO:31.

28. (New) A nucleic acid encoding the polypeptide of claim 26.

29. (New) The nucleic acid of claim 28 which comprises an oligonucleotide sequence selected from the group consisting of:

- (a) SEQ ID NO:17;
- (b) SEQ ID NO:18;
- (c) SEQ ID NO:19;
- (d) SEQ ID NO:20;
- (e) SEQ ID NO:21;
- (f) SEQ ID NO:22;
- (g) SEQ ID NO:23;
- (h) SEQ ID NO:24;
- (i) SEQ ID NO:25;
- (j) SEQ ID NO:26;
- (k) SEQ ID NO:27;
- (l) SEQ ID NO:28;
- (m) SEQ ID NO:29; and
- (n) SEQ ID NO:30.

30. (New) A polypeptide produced by a method comprising:

- (a) expressing from a host cell the polypeptide of claim 26; and
- (b) recovering said polypeptide.

31. (New) A method of screening molecules that bind a scaffolded fusion polypeptide comprising:

- (a) expressing from a host cell the polypeptide of claim 26; and
- (b) identifying a molecule that binds to the polypeptide.